

IN THE CLAIMS

1. (Currently Amended) A computer-implemented method comprising:
  - downloading a 3D (three dimensional) environment development program to a computer system from a Web server over the Internet;
  - executing the 3D development program within the computer system to convert a 2D (two dimensional) desktop environment of the computer system into a 3D computing environment, including installing an interpreter within an operating system of the computer system;
  - providing the 3D computing environment representing a 3D desktop of a computer system in a 3D environment which is presented as a 3D desktop in a 3D room environment, wherein one or more icons of the 2D desktop environment are spatially displayed on one or moremultiple surfaces of the 3D computing environmentroom environment;
  - receiving a two-dimensional application program;
  - the interpreter dynamically converting the two-dimensional application program to a form useable in the three-dimensional computing environment; and
  - presenting content of the converted application program within the 3D computing environment to allow a user of the computer system to navigate the content of the application program within the 3D computing environment;
  - accessing a registry server over the Internet to download additional 3D graphical objects to be used in the 3D desktop, wherein the registry server is associated with an community having a plurality of members, and wherein the registry server is configured to maintain 3D graphical objects, including the

downloaded 3D graphical object, used by the plurality of members including software updates to the 3D desktop;  
storing the downloaded 3D graphical objects in a repository within the computer system, wherein the repository is configured to store all graphical objects used by the 3D desktop, including graphical objects downloaded over the Internet, updates from the registry server, and user defined objects defined locally by a user of the computer system.

2. (Currently Amended) A data processing system-readable medium having a plurality of instructions executable by a data processing system embodied therein, wherein said instructions when executed cause said data processing system to:

download a 3D (three dimensional) environment development program to a computer system from a Web server over the Internet;  
execute the 3D development program within the computer system to convert a 2D (two dimensional) desktop environment of the computer system into a 3D computing environment, including installing an interpreter within an operating system of the computer system;  
provide the 3D computing environment representing a 3D desktop of a computer system in a 3D environment which is presented as a 3D desktop in a 3D room environment, wherein one or more icons of the 2D desktop environment are spatially displayed on one or more multiple surfaces of the 3D computing environment room environment;  
receive a two-dimensional application program;

the interpreter dynamically convert the two-dimensional application program to a form useable in the three-dimensional computing environment; and present content of the converted application program within the 3D computing environment to allow a user of the computer system to navigate the content of the application program within the 3D computing environment;

access a registry server over the Internet to download additional 3D graphical objects to be used in the 3D desktop, wherein the registry server is associated with an community having a plurality of members, and wherein the registry server is configured to maintain 3D graphical objects, including the downloaded 3D graphical object, used by the plurality of members including software updates to the 3D desktop;

store the downloaded 3D graphical objects in a repository within the computer system, wherein the repository is configured to store all graphical objects used by the 3D desktop, including graphical objects downloaded over the Internet, updates from the registry server, and user defined objects defined locally by a user of the computer system.

3. (Currently Amended) The method of claim 1, wherein the 2D desktop environment is an existing desktop environment as a part of the operating system of the computer system, and wherein the 3D computing environment is installed ~~on the top offrom~~ the 2D desktop environment, wherein the 3D computing environment can be activated from the 2D desktop environment in response to a user request in which the 2D application program is converted by the interpreter into a 3D application and the graphical objects are presented in a 3D manner, wherein the 3D computing environment can be deactivated in response to a user request in

request in which the 2D application program is not converted into a 3D application and the graphical objects are presented in a 2D manner, and wherein when the 3D computing environment is activated, the 3D computing environment is automatically presented when the computer system reboots without having to display the 2D desktop environment first.

4. (Currently Amended) The method of claim 3, further comprising:  
developing 3D enabled applications using a software development kit (SDK) within  
the computer system, the 3D enabled applications developed by the SDK can  
be presented in a 3D manner in the 3D desktop; and  
accessing the registry server from the computer system over the Internet to download  
software updates associated with the SDK wherein the 3D computing  
environment can be activated from the 2D desktop environment, and wherein  
the 3D computing environment can be deactivated to reinstate the 2D desktop  
environment in response to a user request.

5. (Currently Amended) The method of claim 4, wherein the Web server comprises a  
maintenance system and database communicatively coupled to the registry server for periodic  
updates of 3D computing environment-based protocols, as well as graphical objects stored in  
the Web server as a library, wherein by storing the graphical objects in the maintenance  
system and database of the Web server, the SDK can be used by users to automatically  
generate 3D enabled Web pages without having the SDK on their desktops when the 3D  
computing environment is activated, the 3D computing environment is automatically  
presented when the computer system reboots without displaying the 2D desktop environment.

6. (Currently Amended)      The method of claim 5, further comprising:  
purchasing the 3D environment development program from an e-commerce server  
over the Internet;  
in response to the purchase, the e-commerce server notifying the Web server to allow  
the computer system to download the purchased 3D environment development  
program from the Web server; and  
the ecommerce server subsequently delivering advertisement information to the  
computer system to be represented within the 3D desktop of the computer  
system further comprising installing a software development kit (SDK) within  
the computer system to enable a user to create a 3D-enabled application to be  
executed within the 3D computing environment, including 2D or 3D graphics  
objects to be used in the 3D computing environment.

7. (Currently Amended)      The method of claim 6, wherein executing the 3D environment  
development program within the computer system comprises installing a persistent kernel  
within the computer system, wherein a user of the computer system is provided with a  
demonstration of the purchased 3D desktop in order for the user to decide whether to activate  
the 3D desktop, wherein if the user chooses not to activate the 3D desktop, the persistent  
kernel is still active in an unobtrusive 2D persistent window on the user's desktop for  
delivering and presenting advertisement information to the user, wherein the registry server  
maintains information regarding downloads to a plurality of computer systems and purchased  
from the e-commerce server, including user profiles, buying patterns, and searches the 3D  
computing environment is configured to allow a user to place an icon within up to a 360°  
spatial environment.

8. (Currently Amended) The method of claim 7, wherein the registry server is accessible from the e-commerce server to obtain information about users of the e-commerce server, such that the e-commerce server can generate targeted advertising and product offerings for a particular user the 3D computing environment is presented as at least one of a room, neighborhood, city, and landscape.

9. (Currently Amended) The method of claim 5, further comprising:  
accessing a community server over the Internet via the 3D desktop, the community server providing information and services to a community having a plurality of members;  
activating a 3D version of the community server via a user interface of the community server; and  
in response to the activation, the community server communicating with a 3D environment special shell component having a 3D special representation of a 2D environment previously available from the community server, such that, instead of viewing content provided by the community server in a 2D manner, a user of the computer system can access the same content in a 3D manner using the 3D desktop of the computer system 8, wherein the 3D computing environment is configured to allow a user to place an icon on one or more walls of the at least one of a room, neighborhood, city, and landscape via a drag-n-drop operation.

10. (Currently Amended) The method of claim 4<sup>9</sup>, further comprising:

navigating content of the community server in a 3D manner via the 3D desktop of the computer system; and

interacting with other members of the community in a 3D manner via the 3D desktop of the computer system.

receiving a Web page from the Web server over the Internet;

determining whether the Web page is a 3D enabled Web page; and

presenting the Web page, if the Web page is a 3D enabled Web page, in the 3D

computing environment without converting the Web page to a 3D enabled Web

page, wherein the conversion is performed only if the Web page is not 3D

enabled.

11. (Currently Amended) The method of claim 10, wherein executing the 3D environment development program within the computer system comprises installing a persistent kernel within the computer system, wherein a user of the computer system is provided with a demonstration of the purchased 3D desktop in order for the user to decide whether to activate the 3D desktop, wherein if the user chooses not to activate the 3D desktop, the persistent kernel is still active in an unobtrusive 2D persistent window on the user's desktop for delivering and presenting the advertisement information to the user, wherein the registry server maintains information regarding downloads to a plurality of computer systems of a plurality of members of the community having content associated with the community determining whether the Web page is a 3D enabled Web page is performed by the interpreter.

12. (Currently Amended) The method medium of claim 2, wherein the 2D desktop environment is an existing desktop environment as a part of the operating system of the

computer system, and wherein the 3D computing environment is installed from the 2D desktop environment, wherein the 3D computing environment can be activated from the 2D desktop environment in response to a user request in which the 2D application program is converted by the interpreter into a 3D application and the graphical objects are presented in a 3D manner, wherein the 3D computing environment can be deactivated in response to a user request in which the 2D application program is not converted into a 3D application and the graphical objects are presented in a 2D manner, and wherein when the 3D computing environment is activated, the 3D computing environment is automatically presented when the computer system reboots without having to display the 2D desktop environment first. ¶  
further comprising:

embedding one or more attributes of the 3D computing environment within the Web page using an XML-based markup language; and  
presenting the Web page in the 3D computing environment using the embedded one or more attributes of the 3D computing environment by executing the XML-based markup language embedded within the Web page.

13. (Currently Amended) The method-medium of claim 12, further comprising  
developing 3D enabled applications using a software development kit (SDK) within the computer system, the 3D enabled applications developed by the SDK can be presented in a 3D manner in the 3D desktop; and  
accessing the registry server from the computer system over the Internet to download software updates associated with the SDK.

presenting the second Web page as a 2D Web page in a 2D environment without executing the XML-based markup language representing the one or more attributes of the 3D computing environment.

14. (Currently Amended) The method medium of claim 13, wherein the Web server comprises a maintenance system and database communicatively coupled to the registry server for periodic updates of 3D computing environment-based protocols, as well as graphical objects stored in the Web server as a library, wherein by storing the graphical objects in the maintenance system and database of the Web server, the SDK can be used by users to automatically generate 3D enabled Web pages without having the SDK on their desktops further comprising navigating via the 3D computing environment content stored in the computer system.

15. (Currently Amended) The data processing system readable medium of claim 214, further comprising:  
purchasing the 3D environment development program from an e-commerce server over the Internet;  
in response to the purchase, the e-commerce server notifying the Web server to allow the computer system to download the purchased 3D environment development program from the Web server; and  
the ecommerce server subsequently delivering advertisement information to the computer system to be represented within the 3D desktop of the computer system.

wherein the 2D desktop environment is an existing desktop environment as a part of the operating system of the computer system, and wherein the 3D computing environment is installed on the top of the 2D desktop environment.

16. (Currently Amended) The ~~data processing system readable medium~~ of claim 15, wherein executing the 3D environment development program within the computer system comprises installing a persistent kernel within the computer system, wherein a user of the computer system is provided with a demonstration of the purchased 3D desktop in order for the user to decide whether to activate the 3D desktop, wherein if the user chooses not to activate the 3D desktop, the persistent kernel is still active in an unobtrusive 2D persistent window on the user's desktop for delivering and presenting the advertisement information to the user, wherein the registry server maintains information regarding downloads to a plurality of computer systems and purchased from the e-commerce server, including user profiles, buying patterns, and searches, wherein the 3D computing environment is configured to allow a user to place an icon within up to a 360° spatial environment.

17. (Currently Amended) The ~~data processing system readable medium~~ of claim 16, wherein the registry server is accessible from the e-commerce server to obtain information about users of the e-commerce server, such that the e-commerce server can generate targeted advertising and product offerings for a particular user, the 3D computing environment is presented as at least one of a room, neighborhood, city, and landscape.

18. (Currently Amended) The ~~data processing system readable medium~~ of claim 16, further comprising:

accessing a community server over the Internet via the 3D desktop, the community server providing information and services to a community having a plurality of members;

activating a 3D version of the community server via a user interface of the community server; and

in response to the activation, the community server communicating with a 3D environment special shell component having a 3D special representation of a 2D environment previously available from the community server, such that, instead of viewing content provided by the community server in a 2D manner, a user of the computer system can access the same content in a 3D manner using the 3D desktop of the computer system,

wherein the 3D computing environment is configured to allow a user to place an icon on one or more walls of the at least one of a room, neighborhood, city, and landscape via a drag-n-drop operation.

19. (Currently Amended) The ~~data processing system readable~~ medium of claim 182, further comprising:

navigating content of the community server in a 3D manner via the 3D desktop of the computer system; and

interacting with other members of the community in a 3D manner via the 3D desktop of the computer system,

wherein the instructions further cause the data processing system to:

~~receive a Web page from the Web server over the Internet;~~

~~determine whether the Web page is a 3D enabled Web page; and~~

present the Web page, if the Web page is a 3D enabled Web page, in the 3D computing environment without converting the Web page into a 3D enabled Web page, wherein the conversion is performed only if the Web page is not 3D enabled.

20. (Currently Amended) The ~~data processing system readable~~ medium of claim 19, wherein executing the 3D environment development program within the computer system comprises installing a persistent kernel within the computer system, wherein a user of the computer system is provided with a demonstration of the purchased 3D desktop in order for the user to decide whether to activate the 3D desktop, wherein if the user chooses not to activate the 3D desktop, the persistent kernel is still active in an unobtrusive 2D persistent window on the user's desktop for delivering and presenting the advertisement information to the user, wherein the registry server maintains information regarding downloads to a plurality of computer systems of a plurality of members of the community having content associated with the community wherein determining whether the Web page is a 3D enabled Web page is performed by the interpreter.